



Usage-based Auto Insurance (UBI)

A revolution is underway. Is your company ready?

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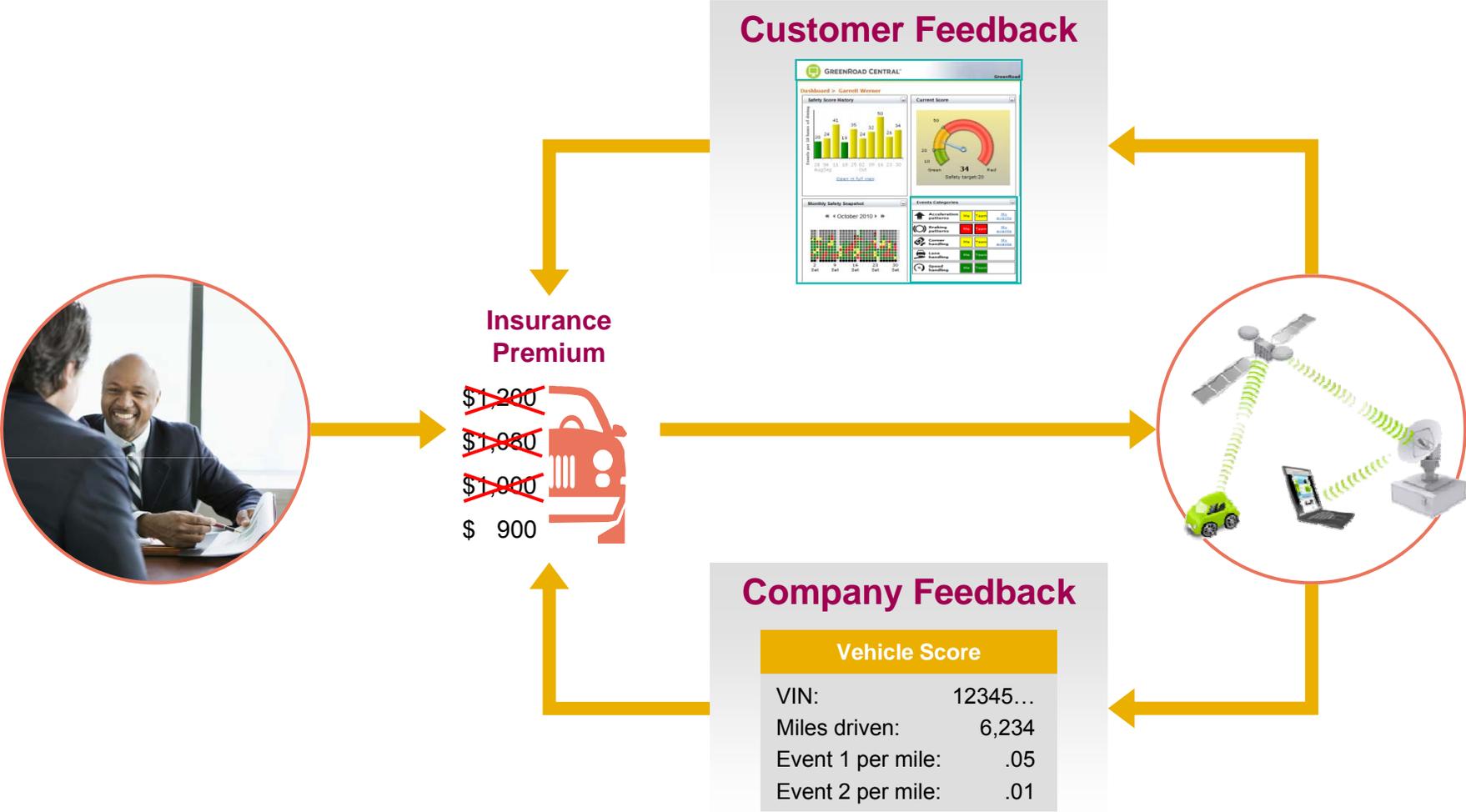
Introduction to UBI

The Vision: What if...

- ...you **had a proposition** that could proactively engage with your customers, enhance the customer experience and provide insight and guidance on risk activity?
- ...you **implemented a product** that reduces the loss ratio by more than 20% for the portfolio as a whole?
- ...you **found a variable** that could segment your current book such that 20% of your vehicles had a loss ratio five times lower than the highest 20%?

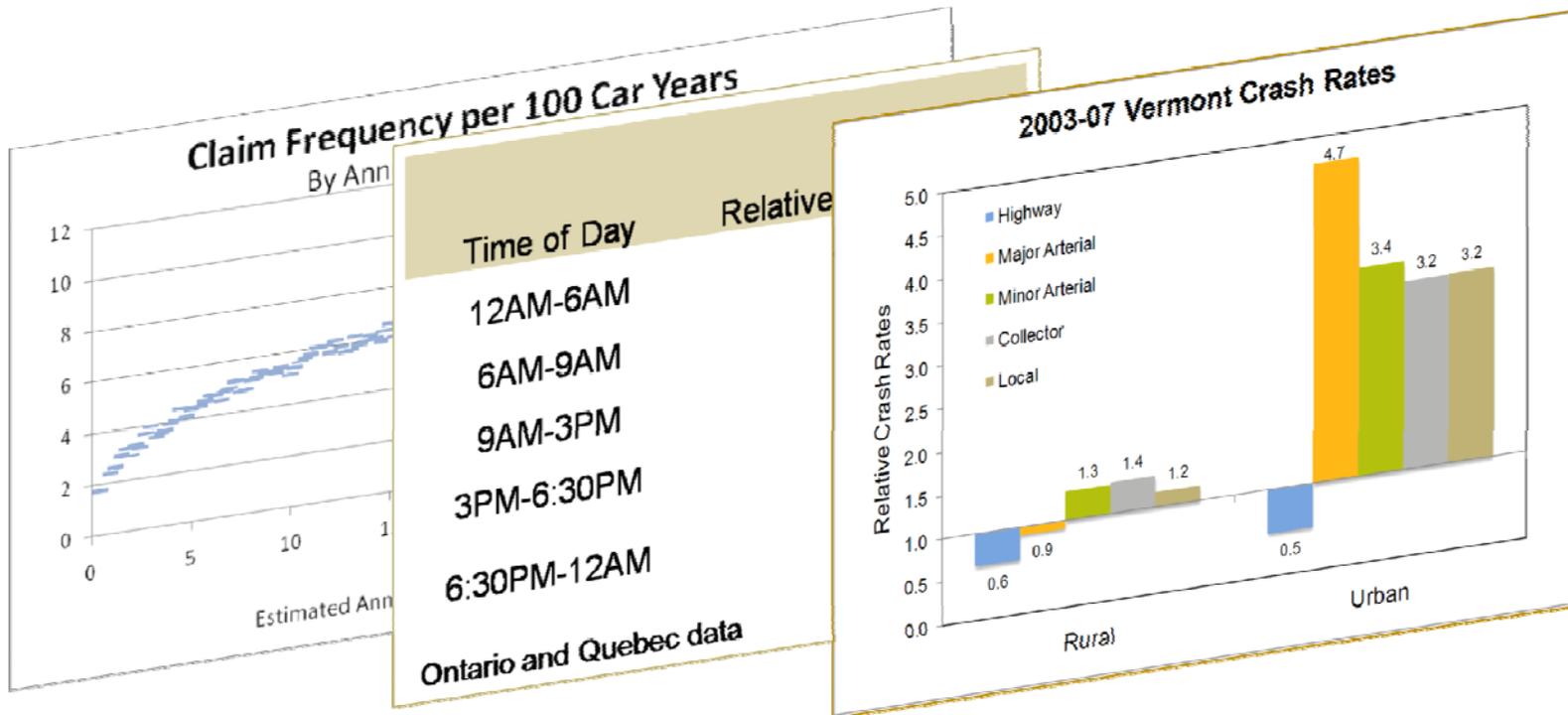
Usage based insurance can provide all of the above - and more...

Usage-Based Insurance (UBI)



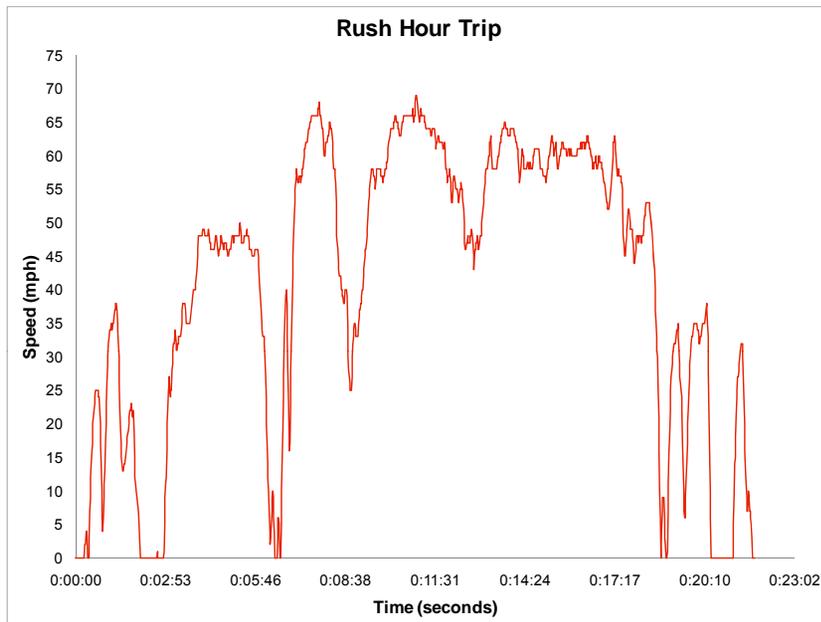
Telematics data is very predictive

- Various studies demonstrate predictive potential



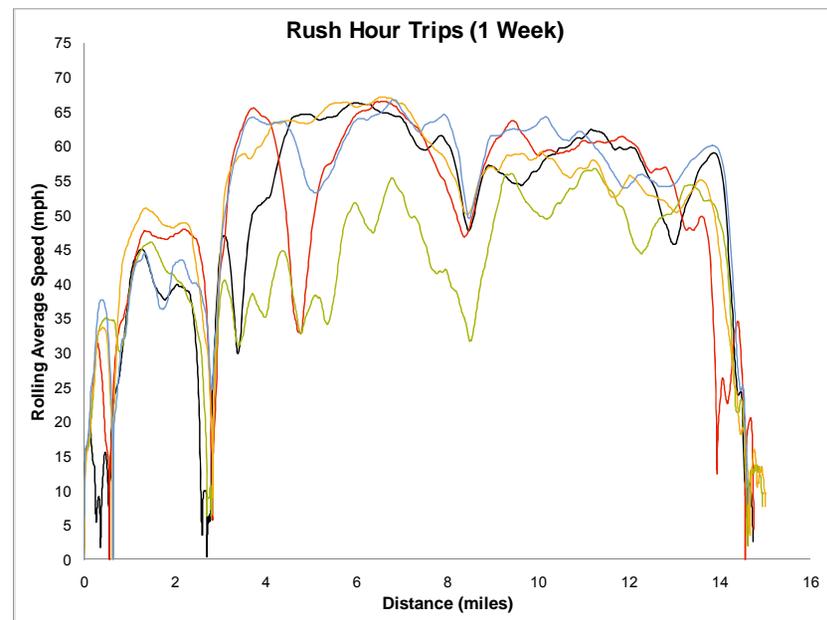
- Companies gain competitive advantage through better segmentation

Even the simplest data can be very powerful



- That tells a lot...
 - Distance traveled
 - Severe braking and acceleration
 - Approximate road type
 - When the car was operated
 - Driving “patterns” (drive to work)

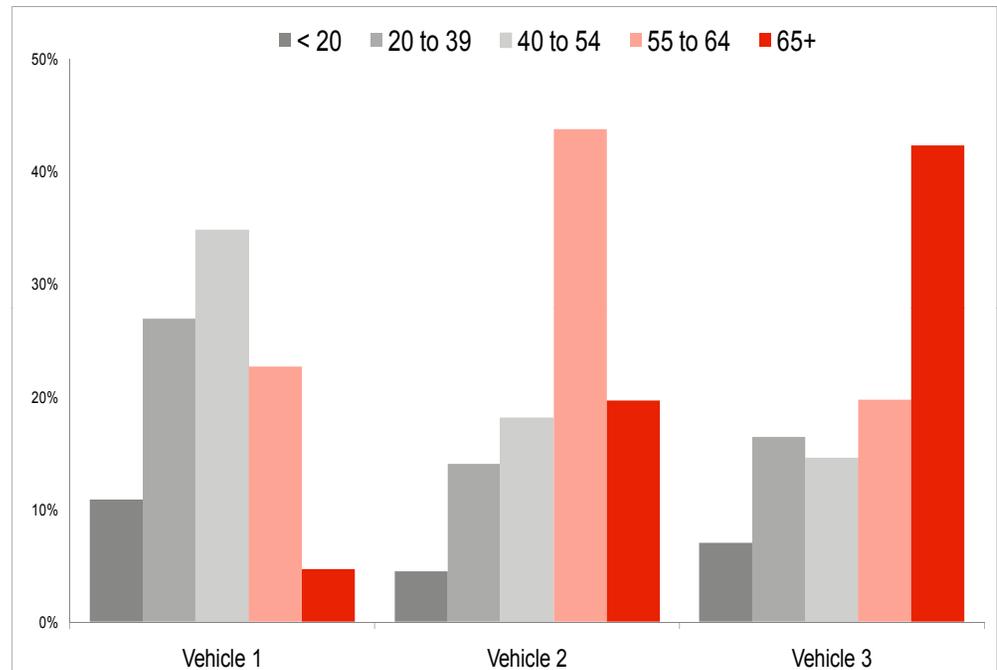
- The earliest basic devices provided limited data
 - Second-by-second speed
 - Time



Yes, “vehicles” do have different patterns

	Vehicle 1	Vehicle 2	Vehicle 3
Annual Miles	9.4K	20.1K	12.2K
Hard Brakes/Mile	0.05	0.10	0.04

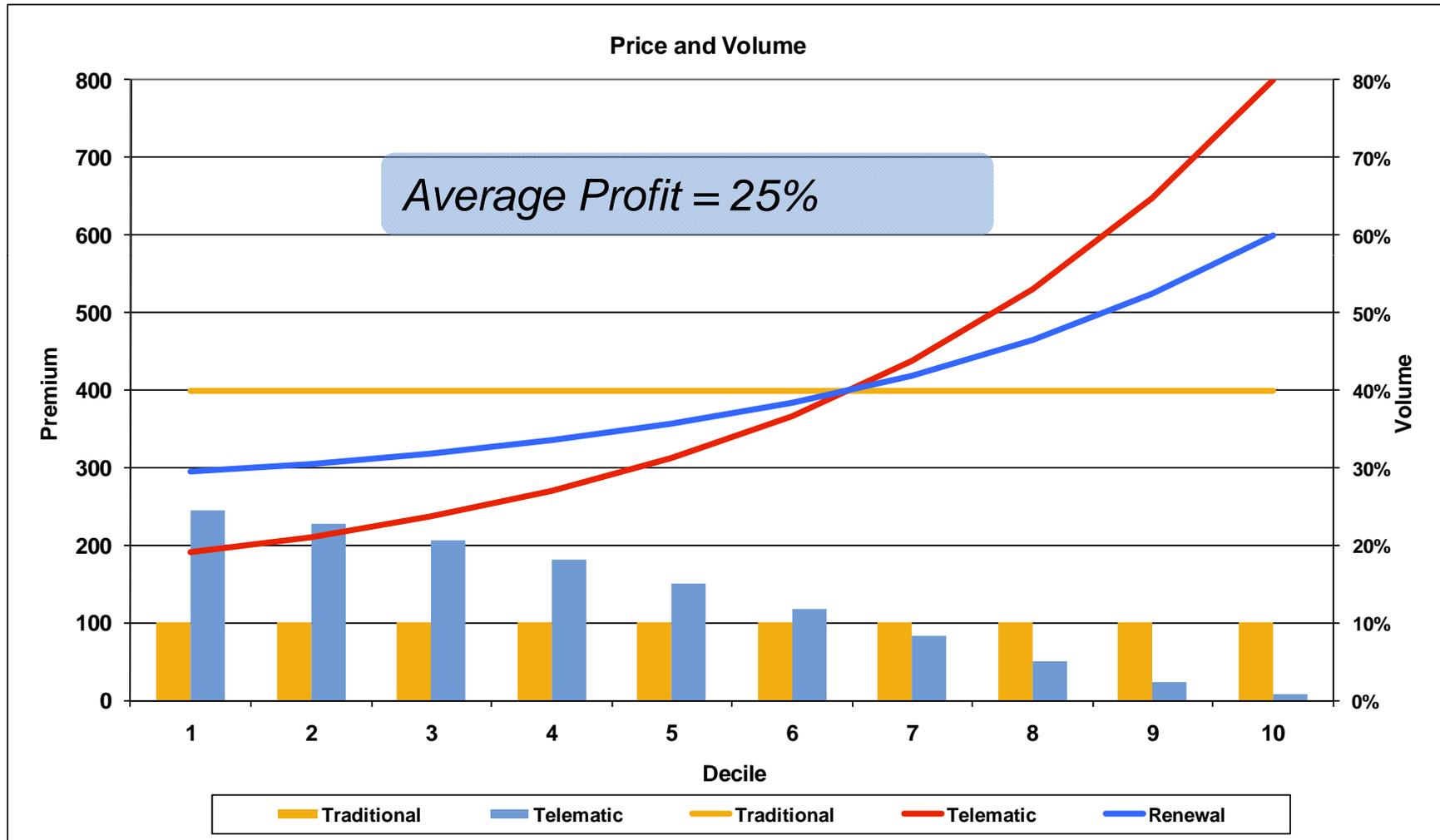
	Vehicle 1	Vehicle 2	Vehicle 3
Day, Rush	59%	16%	29%
Day, Non-Rush	18%	40%	65%
Evening	3%	24%	6%
Late Night	0%	20%	0%



- Vehicle 1 is driven safely during the day and mostly on local roads
- Vehicle 2 is driven mostly on highways at night and has twice the hard brakes
- Vehicle 3 is driven safely during the day and mostly on the highway

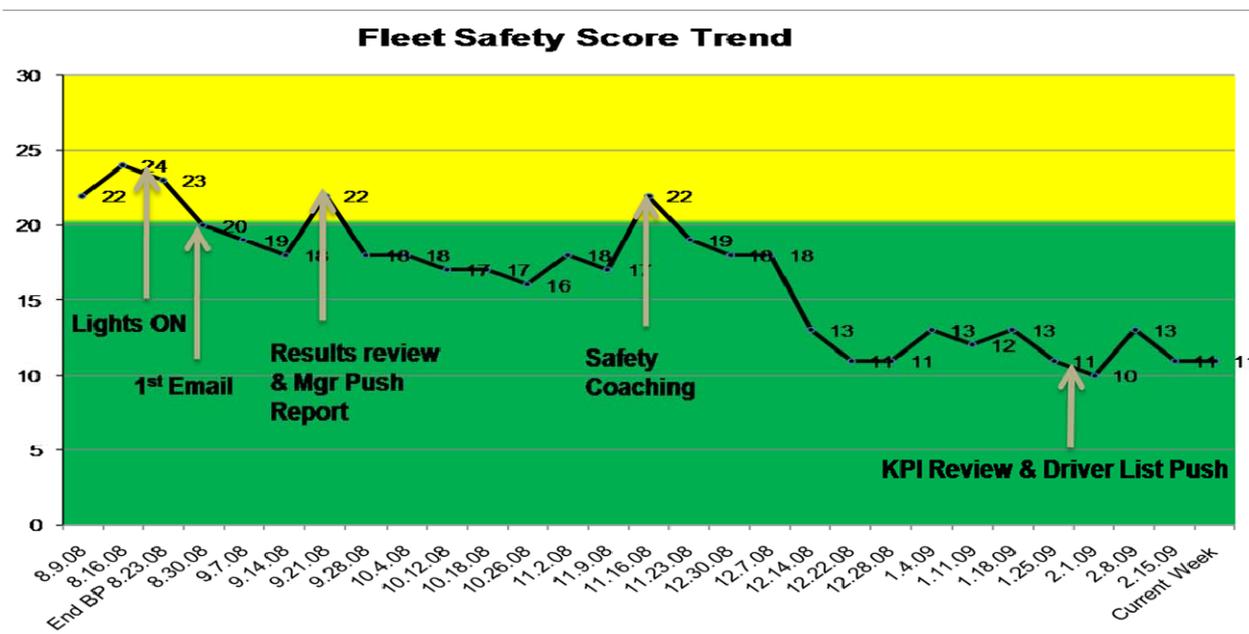
Telematics Predictive Power

Discounting safe drivers improves volumes where profitable



Monitoring and providing feedback improves driving

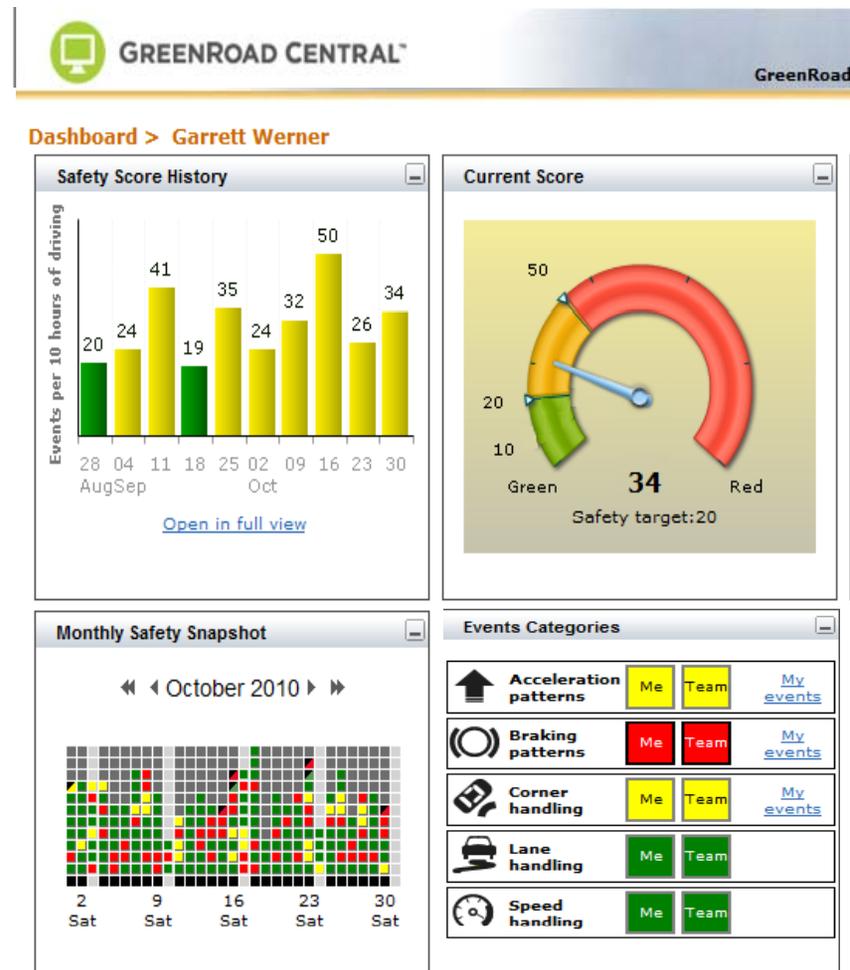
- Norwich Union: 30% frequency reduction
- Iceland postal service reduced crash rate by 56%
- Pepsi (Iceland) reduced fleet crash rates by over 80%
- GreenRoad: 54% improvement in fleet crash rate



Safer drivers decrease fuel consumption roughly 10%

UBI is consumer friendly and socially appealing

- Makes sense and is fair to vary premium based on the way the vehicle is driven
- Will ultimately reduce the reliance on other controversial proxy variables
 - Insurance scores
 - Infrequent accidents
 - Driver assignment
- Consumers control their driving behavior, so with feedback they can reduce their premium
- “Safe” driving is “green” driving



How do regulators feel about UBI?

Want variables that are “fairly” discriminatory

- Most states require that rates are adequate and not excessive or unfairly discriminatory
- UBI varies rates based on driving behavior, which has been proven to be predictive and is clearly “fair”

Like that UBI makes sense and is controllable

- Regulators are concerned with factors like credit that don’t “make sense” to consumers. UBI makes sense
- Regulators prefer variables that give the consumer “control” to reduce costs without reducing coverage

Support “green” initiatives

- Safer driving and fewer miles significantly reduces emissions
- 14 states have pay as you drive specifically listed in their climate plans

Endorse efforts to save lives

- Highway accidents result in approximately 3M injuries and 35K fatalities each year, and the government seeks to reduce that through various programs
- Driver feedback significantly reduces risky driving

For these reasons, regulators are anxious to approve UBI programs

What is the perspective of the consumer?

Understand it and like to control their premium

- Consumers don't like the use of credit scores because it doesn't make sense.
- Generally speaking, "good" drivers opt in, get participation discounts, and have the opportunity for even greater discounts

Want access to useful driving feedback

- Accidents are the leading killer of teens. UBI programs give parents a variety of tools to help monitor and counsel their teen drivers.
- Many adults are faced with elderly parents whose driving is deteriorating. UBI can help evaluate skill deterioration and provide helpful safety tips

Like options for value-added services

- Consumers generally like options
- Programs vary from basic to deluxe in their service offerings. Some consumers really like the added services

Value companies that are "green"

- Society is becoming increasingly environmentally conscious, and consumers value companies that are "green"
- Younger consumers like new and different products even when the product may not appeal to them

Most consumers view UBI favorably and participants are very satisfied

What does it mean for the company?

Better pricing

- The predictive power of the telematics data is undeniable
- Initial programs included relativities from .39 to 1.09 on top of the existing rating plan, highlighting the additional segmentation power

Product differentiation & brand awareness

- Some programs are very basic discount programs that will appeal to price sensitive groups. More sophisticated programs add a wide variety of value-added services that differentiate the product
- UBI programs promote the idea that the company is “modern” and “green”

Reduced loss costs

- Consumers understand UBI, so there is a significant self-selection effect
- Behavioral modification programs have been shown to significantly reduce risky driving and, consequently, accident frequency
- Potential for further reduction by using data in claims handling

Consumer satisfaction and retention

- Consumers want to pay less for their insurance, and this gives discounts that only their current carrier can offer (as others don't know their driving behavior)
- Ancillary services (e.g., teen tracking) greatly appeal to certain consumers and make the insurance product more valuable to them
- Retaining existing customers is significantly cheaper than adding new ones

UBI programs lead to better retention and greater profits

Market Update

Early adopters have a huge advantage

“The key to success in UBI insurance will be to move early. Insurers feel an overpowering need to deploy systems absolutely as quickly as they can because the likelihood is that the first module a customer installs will be his or her last. Once the insurer learns that customer’s driving behavior and can accurately and affordably underwrite their risk, the customer is unlikely to switch insurers. The competing insurer will always be at a disadvantage, not knowing the customer’s driving behavior.” (Source: StrategyAnalytics.com)

- This is different than insurance credit scores!
 - Credit scores were controversial, so many companies didn’t implement until they began to be adversely selected against. Using publicly available scores, they “caught up”
 - Driving behavior is not available from a third-party source, so late comers will not be able to recover

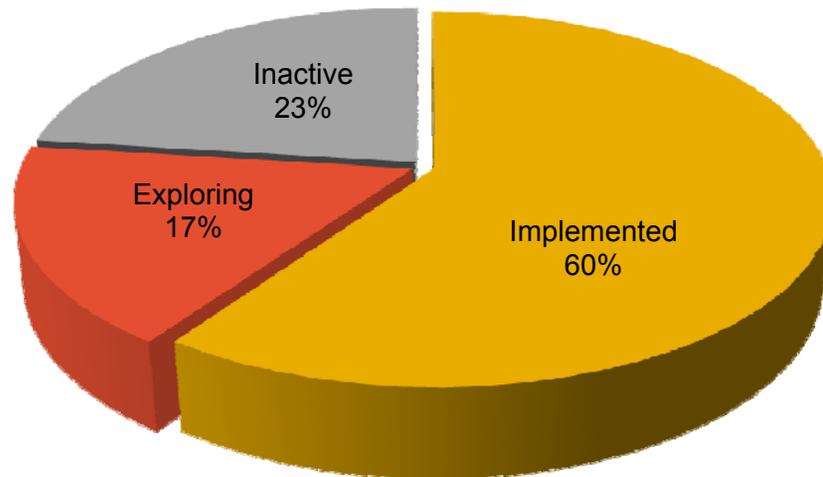
...and late-comers will have trouble recovering

UBI in personal auto around the globe



Top 50 U.S. private passenger auto companies

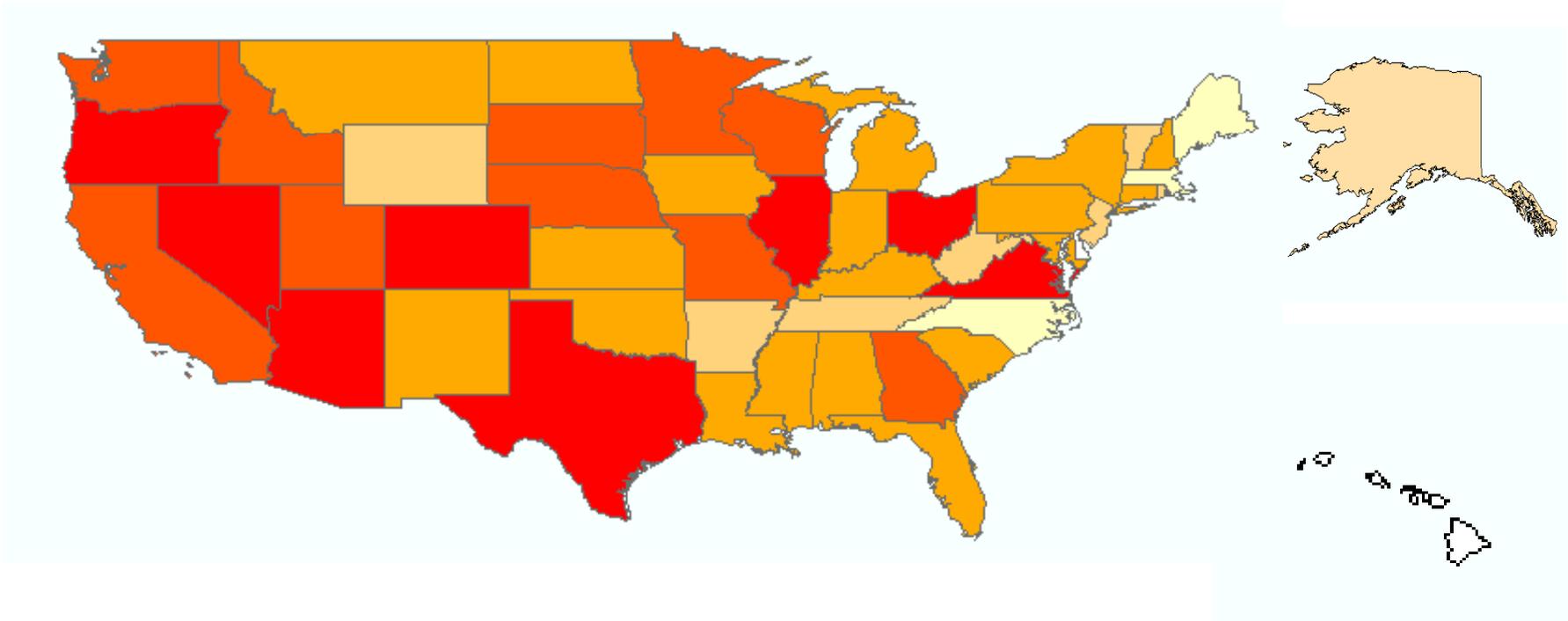
- At least six top 10 personal auto insurers have implemented programs to insureds in at least one state
- U.S. companies representing over 75% of the market already have programs or are actively pursuing them



“UBI device sales rocketing from \$50 million in 2011 to approximately \$2.6 billion by 2015.”
— FC Business Intelligence

Widespread presence of personal lines programs in US

- Seventeen states have 4+ personal auto UBI programs implemented



Progressive SnapshotSM



- Optional program with customer selecting which vehicles to enroll
- Wireless device plugged into OBD II port records time, speed and harsh braking
- Discount calculated based on first 30 days, then applied for remainder of term
- Device removed after first term and discount is fixed until significant endorsement
- Maximum discount of 30% and no surcharge in most states
- Approved in 39 states and Washington D.C.

National rollout proceeding and quickly building market share

Allstate Drive WiseSM

- **Drive Wise** launched in Illinois in January 2011
 - Other states by 2nd quarter 2011
- 10% initial discount
 - Up to 30% at renewal
 - No surcharges
- \$10 technology fee semi-annually
- Driver score based on driving behaviors
 - Mileage
 - Hard brakes
 - Speeding (80+ mph)



Built driver rating model similar to Progressive's challenging their patent

State Farm In-Drive®

- Existing Drive Safe & Save Program with OnStar in five states
- In-Drive® for IL in “September with more states to be added in 2012”
- Discount up to 50% based on mileage, turns, acceleration, braking, speed and time of day
- \$10 initial fee with \$5 to \$14.99/month upgrade for additional features
 - Emergency response
 - Stolen vehicle location assistance
 - Vehicle diagnostic alerts and maintenance reminders
 - Speed alerts
 - Website and smartphone app for remote and mobile access

Building a comprehensive product offering with many consumer options

Advanced Portal Platform – State Farm (HTI Platform)

"provide drivers with a wide range of new options that will make for a smarter vehicle and even smarter driver"
--Mike Wey, State Farm

State Farm® Driver Feedback™ for iPhone



Drive Smarter. State Farm Driver Feedback scores your driving and gives you tips to help you drive even better.

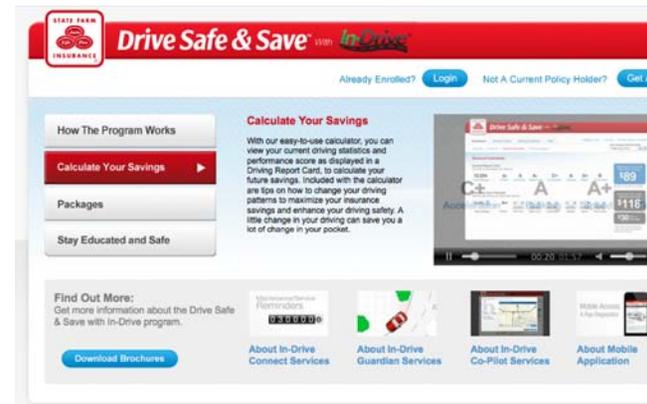
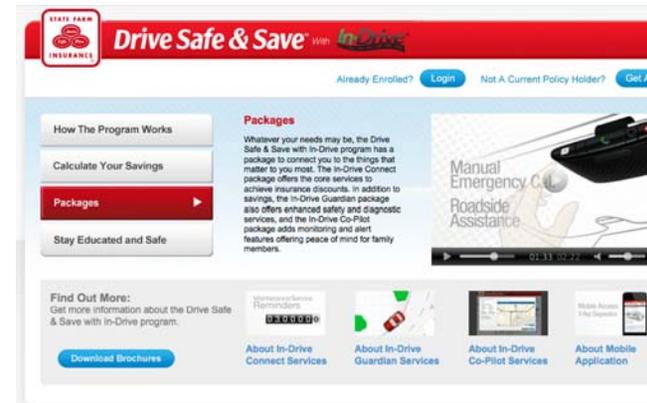
According to the National Highway Traffic Safety Administration*, three of the riskiest driving behaviors are hard acceleration, hard deceleration, and hard swerves. So we built this app to help drivers of all ages improve in these areas.

The app's accelerometer recording technology measures your acceleration, braking, and cornering. You're given a score for each, as well as an overall score for each trip you record.

Helpful tips make it easier for you to take your driving to the next level.

Features

- Record driving using your device's accelerometer and GPS location**
- View all alerts in a list view or overlaid on a map
- Compare two trips against each other
- Send trip results via email and SMS
- Support for multiple users



Liberty Mutual

- Inherited Safeco's 'Teensurance' program for drivers up to age 25
- 15% discount
- Participants pay \$15 a month for a satellite-tracking service
- Parents can track vehicle location and disable the car remotely if
 - driven outside set boundaries
 - exceeds a preset speed limit
 - drives past a curfew
- Launched 'OnBoard Advisor' to provide driver coaching
- 'Rewind' introduced which provides forgiveness of violation surcharge with telematics monitoring



Teen programs were extremely popular for early adopters

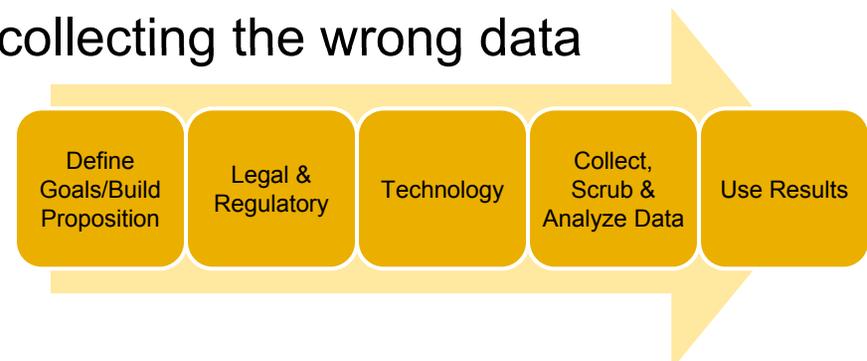
The US market is evolving rapidly

- The US market has embraced UBI and companies are rapidly moving toward implementation
- Programs have evolved from a simple “event counter” pricing approach to comprehensive product offerings
- Even small and typically slow-moving companies are adopting to gain market share and avoid a repeat of credit scoring
- Anticipate UBI programs will be a standard product offering for all major companies in the next 3-5 years
- Implementing UBI is a non-trivial project, so it is important to get started now to avoid being left behind

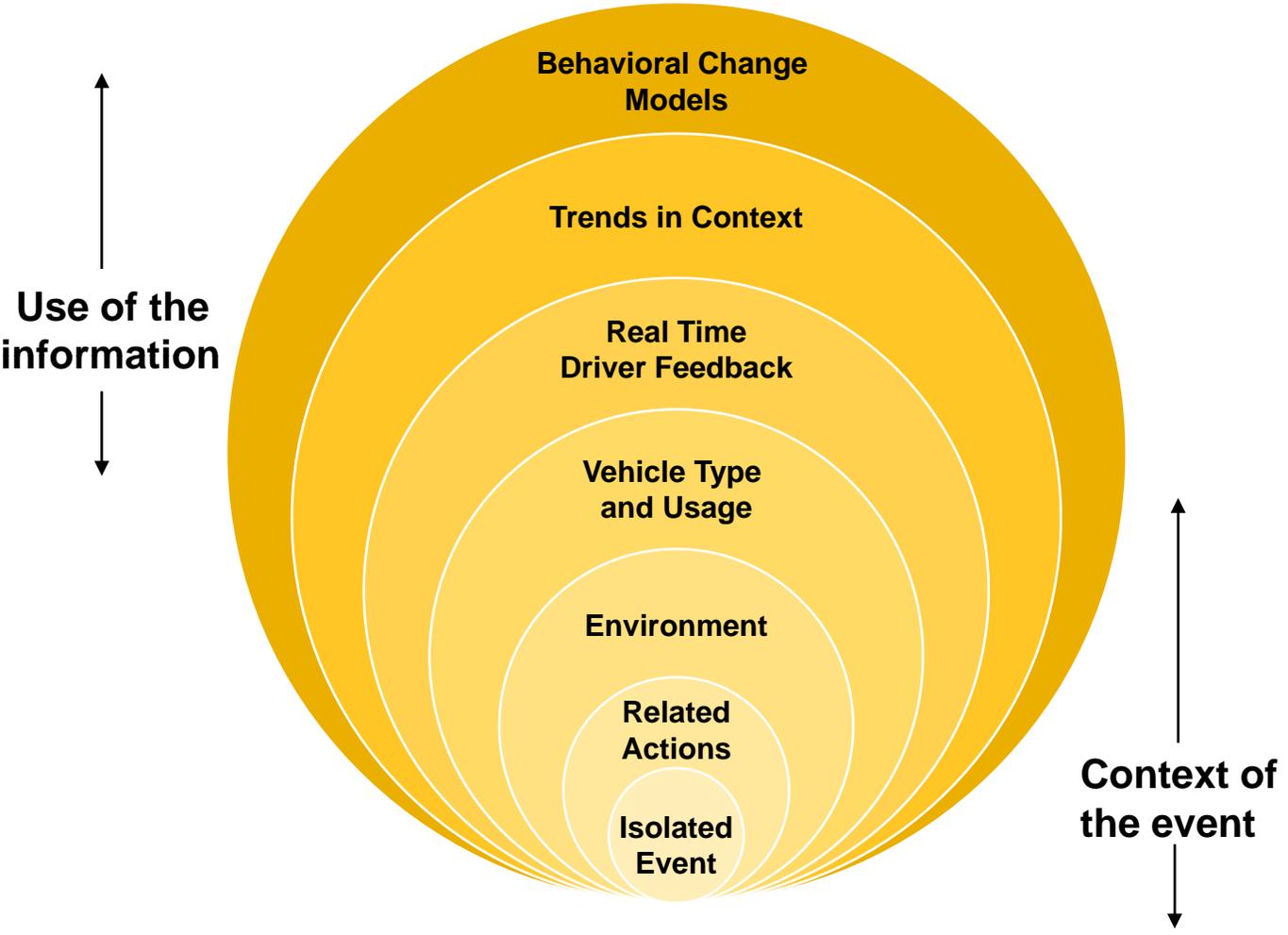
Challenges

What are the challenges to implementing UBI?

- UBI projects are extremely complex and require cross-functional teams
- Product must appeal to your market while still being profitable
- Managing the legal and regulatory hurdles
- Determining which of the multitude of devices available will best meet the needs of the program
- Extensive IT infrastructure required to collect driving data, to integrate UBI scores with the current system and to give driving feedback
- No publicly available data to jump-start a program
- Danger of wasting time and money collecting the wrong data
- Driving data is much different than traditional experience data and requires special data scrubbing and analysis techniques



Context of a Risky Event



UBI implementation is costly and time intensive



- Typical companies take 3+ years and millions of development dollars to implement very basic proprietary programs
 - Projects require education and cooperation of entire company due to the cross-functional nature of UBI products
 - Significant IT infrastructure development is required to fully support a UBI program
 - Scrubbing, preparing and analyzing telematics data is much different than that for standard data
 - Takes time to build volume to for credible results using telematics data
 - Depending on the use, companies may have to make filings, build web portals, etc

Summary

Why is UBI game-changing?

- Differentiates product offering by offering additional services
- Significantly increases pricing accuracy
- Appeals to consumers as it makes sense, is controllable and minimizes reliance on controversial proxies
- Attracts lower-risk insureds via self-selection
- Allows customers to understand and eliminate risky behaviors, actually reducing accident frequency
- Improves claims handling



All this means increased retention and profits!

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